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Ralph E. Johnston

George H. Valentine

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Recommended Citation

Johnston, Ralph E. and Valentine, George H., "Field Selection and Storage of Seed Corn" (1923). *Extension Circulars*. Paper 148.
http://openprairie.sdstate.edu/extension_circ/148

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Extension Circular No. 149. 1923

South Dakota State College
and United States Department
of Agriculture Cooperating.

FIELD SELECTION AND STORAGE
OF SEED CORN

by

Ralph E. Johnston
and
Geo. H. Valentine
Extension Agronomists

A. WHY SELECTED FROM THE FIELD?

"Seed Corn should be selected in the field from stalks which yield best in equal competition with others."
Prof. G. P. Hartley in F. B. 1175.

"Seed corn should be carefully selected from the field in September, before hard freezes occur". S. D. Bulletin 181.

Time to Pick Seed Corn

S E P T E M B E R						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						
Seed Corn May Freeze Later						

"For several reasons it is very important that seed corn be selected in the field as the plants are maturing. The best time is when the leaves of the plants are still green, the husks beginning to turn yellow, and the ears well dented. When the seed ears are selected from the plants as they are maturing, the choice can be made on a sound basis to maintain or increase the yielding power of the variety and diseased plants can be recognized and avoided. At the same time, the corn is gathered early enough so it can be cured without danger of injury by freezing. To put off the selection until the leaves on the majority of the plants are yellow from natural ripening or from killing by frost makes efficient selection difficult".

Prof. A.C.Arny, Spec. Bul.
58, Ext.Div. Univ.ofMinn.

B. WHAT EARS TO SELECT:

"The following points should be observed in selecting seed corn from the field:

1. Ears of medium size only should be chosen.
2. The grains should be well dented (corn will make satisfactory seed as soon as the grains are well dented.)
3. The ears should be of good shape (as in Fig. 2 -next page), but early maturity must not be sacrificed for fancy points.
4. Ears should be chosen which hang down because they shed water (as in Fig. 1.)
5. The shank should be of medium length and diameter.

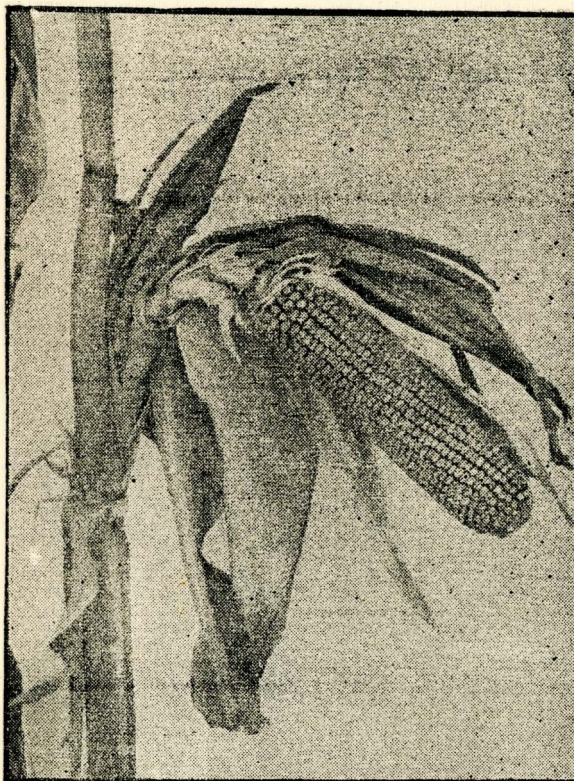


Figure 1. - A well matured ear on a healthy shank is best for seed. (Courtesy of Indiana Experiment Station).

6. There should be two good stalks in the hill from which a seed ear is taken". (Cir. 225, Ill. Agri. Exp. Station.)

The cost of obtaining seed enough by the field selection method is less than thirty cents. This is indeed a very low cost for this better grade of seed corn obtained.

C. THE OFFICIAL SCORE CARD AND SEED EARS:

The requirements of corn for seed and show are very similar. The official score card is shown herewith and the consideration of these points will improve the quality of corn selected according to these standards.

Points to Consider	: Perfect	:
	: Score	:
	:	:
Uniformity of ears	10	
Shape of ear	10	
Color of grain	5	
Color of cob	5	
Tips of ears	5	
Butts of ears	5	
Length of ears	5	
Circumference of ears	5	
Uniformity of kernels	5	
Shape of kernel	5	
Space between rows	5	
Space between kernels at cob	5	
Seed and market condition	20	
Proportion corn to ear	10	
<u>Total score</u>	<u>100</u>	

D. PROPER STORAGE OF SEED CORN:

"Extra care in selecting, curing, testing and grading the seed corn will do much to improve the stand and yield of corn, thus saving labor, reducing cost per bushel and increasing net profit per bushel.

Methods of Storing Seed Corn:

Wire hangers made from fencing.	Lath rack.
Twine method.	Wire rack.
Patent hangers.	Nail system,
	(on studdings, rafters, etc.):

"When the seed corn has been carefully selected the next step is to dry it properly. There are many commercial racks adapted to this purpose which are very satisfactory. Good racks can be made by using 1 X 4 inch lumber

and making frames about 2 by 3 feet in size with a heavy grade of poultry wire of even mesh stapled to each side so that the ears may be stuck through. Small quantities of seed corn may be hung up conveniently by using doubled string or a piece of binding twine about 6 or 7 feet long when doubled. (See Fig. 3). One loop is held in each hand by the operator and a helper then places the first ear at the middle point of the doubled twine. The operator holds this ear between his feet and then crosses the loops. The helper places another ear where the strings cross and the process is thus continued until the string is full and can be hung up by one loop. The main point to keep in mind is that seed corn should not be piled up as the germinating power is very likely to be destroyed even though it is left in piles for but a few hours. This is due to heating caused by moisture in the corn. No two ears should be allowed to touch each other and it is not advisable to spread them on a tight floor as they need air on all sides." (S.D.Bul. 181, Agricultural Experiment Station).



Figure 3.